

in the lungs. The bacteriological analysis isolated an organism resembling closely the bacillus of Yersin but the microbe was not pathogenic to the rat on ingestion. All of the other procedure of inoculation, particularly of the subcutaneous injection, which is so sensitive in the case of true plague, were without result. This was further confirmed by the agglutination test, the organism remaining indifferent on contact with pest serum.

According to Ganthier and Rayband, it is better for the serum identification to use an anti-pest serum which has not been heated. The ordinary therapeutic serum of the Pasteur Institute has been submitted to a certain amount of heat which lessens its agglutinating power.

#### Anti-Pest Substances.

Haffkine's anti-pest lymph. Haffkine's prophylactic is neither a serum nor a vaccine. It is not a serum because it is not made from the blood of any animal. It is not a vaccine because it does not contain the attenuated and living microbe as does the anti-anthrax vaccine and true vaccine, for example. Therefore the name of lymph suits admirably. Here is how Haffkine prepares his prophylactic lymph: a flask of two litres is filled with a certain amount of bouillon, upon the surface of which is floated some butter. The bouillon is sterilized and then planted with a culture of the bacilli.

The bacilli develop upon the under surface of the butter, sending forth numerous vegetations in the form of stalactites toward the bottom. Five or six times in the course of a month one lightly agitates the flask in such a manner as to precipitate to the bottom the major part of the culture. At the end of a month one satisfies himself that the culture has remained pure, then the liquid is drawn off into test tubes, which are sealed and heated for one hour at 70°. The contents of these tubes are used for inoculations. Before making the inoculations the tube is agitated so as to place in suspension the deposit from the fluid.

Haffkine inoculates from 3-3½ cc. in an adult; 2-2½ cc. in a woman; 1 cc. in a child of more than 10 years; 0.1-0.3 cc. in young infants.

Our colleague, Calmette, spoke in the following terms of the method of Haffkine at the Congress of Rotterdam in 1901:

"I have been able to prove from the first," said he, "that the immunity after a single inoculation of 3 cc. of a culture in bouillon one month old and heated for one hour at 70°, is not established for seven days. It lasts on the average three weeks in the guinea pig and one month in the ape, testing the resistance for these animals with the same dose of the same virus. In the rat the immunity is more durable after a single injection of 2 cc. of a heated culture. In my experiment it has lasted as long as three months. It is therefore possible by Haffkine's method with a single inoculation with cultures killed by sufficient heating, in the great majority of cases to establish in man a sufficient immunity to permit him to pass through an epidemic of plague with immunity.

"Haffkine's vaccination should in consequence render the greatest service in infected countries. because of the ease with which it is rapidly grown and by reason of the fact that great quantities of cultures may be produced almost without expense and because the inoculation of heated cultures, even though accompanied with a little pain in certain cases, is not followed by a prolonged incapacity for work."

(To be Continued.)

## PUBLICATIONS

**A Practical Treatise on Materia Medica and Therapeutics, with Especial Reference to the Clinical Application of Drugs.** By John V. Shoemaker, M. D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. Sixth edition. F. A. Davis Company, Publishers.

This work now appearing in its sixth edition is too well known to require any lengthy review to point out its merits. The last revision has necessitated many changes in the text, particularly in the direction of nomenclature and strength of preparations. Other notable changes have also been made. Part I of this edition is entirely new and deals with pharmacology in general; included in this portion is a table giving the changes in the strength of preparations and relative dosage, in the present Pharmacopeia and the one which preceded it. Among the new therapeutic agents discussed may be mentioned the Roentgen ray, Finsen light and vibrotherapy. The articles on serumtherapy, animal extracts and hydrotherapy are all suggestive, while that on electricity in medicine is excellent.

A. J. L.

**Atlas and Text Book of Human Anatomy.** By Dr. Johannes Sobotta, Professor of Anatomy in the University of Wurzburg. Edited, with additions, by J. Playfair McMurrich, A. M., Ph. D., Professor of Anatomy in the University of Michigan. Volume II. The Viscera, including the Heart. 214 illustrations, mostly in color. W. B. Saunders Company, 1906.

This volume is the immediate continuation of the first, and treats of the viscera. For purposes of convenience in dissecting the heart has been included in this book. Topographic anatomy as such has not been specially considered, but often, especially in the original illustration, the method of presentation is necessarily of a topographic character. So well known is Sobotta's Anatomy, particularly in the original, that it seems unnecessary to the reviewer to point out the excellence of the many illustrations produced by the artist, Mr. Hajek. The same methods of reproduction have been employed in this volume as in the first, namely autotype, multi-colored lithography, and the three-color process. Explanatory figures and diagrams have been reproduced by simple line-etchings.

A. J. L.

**Cosmetic Surgery. The Correction of Featural Imperfections.** By Charles C. Miller, M. D. Second Edition Enlarged. 134 pages. Published by the Author, 70 State street, Chicago.

This small volume deals with an aspect of surgery somewhat remote from the interest of surgeons, but sooner or later featural surgery is destined to take its place as a recognized specialty. Left largely in the hands of "beauty specialists" and others of that tribe, advances in this field have been limited from want, in part, of adequate stimulus on the part of the medical profession. Fortunately here and there, a few at first looked upon askance have established reputations founded upon honest effort in the uplifting of practice of this kind. Among these may be mentioned the author of this book. "Four or five years ago ethical practitioners laughed or grew hostile when I mentioned my interest in elective surgery of the face for the correction of featural imperfections which were not actual deformities. Two years ago medical publishers refused to consider a manuscript upon the subject."